

6451. Sodium Tetrathiocarbonate Field Fumigation - General Requirements.

The provisions of section 6451.1 apply to field soil fumigation using sodium tetrathiocarbonate within the Sacramento Metro, San Joaquin Valley, South Coast, Southeast Desert, or Ventura ozone nonattainment areas below during the May 1 through October 31 time period. Replant of individual vine or tree-sites (tree holes) less than one contiguous acre, and raised-tarpaulin nursery fumigations of less than one acre, and greenhouses and other similar structures are not considered field soil fumigations under the provisions of section 6451.1.

NOTE: Authority cited: Sections 11456, 12976, 12981, 14005, and 14102, Food and Agricultural Code. Reference: Sections 11501, 12981, 14006, and 14102, Food and Agricultural Code.

6451.1 Sodium Tetrathiocarbonate Field Fumigation Methods.

(a) The field soil fumigation of sodium tetrathiocarbonate is limited to methods specifically identified in the labeling.

(b) Notwithstanding subsection (a), a reduced volatile organic compound emission field fumigation method approved pursuant to section 6452 or a method for experimental research purposes pursuant to a valid research authorization issued according to section 6260 may be allowed.

NOTE: Authority cited: Sections 11456, 12976, 12981, 14005, and 14102, Food and Agricultural Code. Reference: Sections 11501, 12981, 14006, and 14102, Food and Agricultural Code.

6452. Reduced Volatile Organic Compound Emissions Field Fumigation Methods.

(a) For the Sacramento Metro and South Coast ozone nonattainment areas, the Director may approve use of a field fumigation method not described in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, and 6451.1 if the request is accompanied by scientific data documenting the volatile organic compound (VOC) emissions. The emission rating specified in section 6452.4 or the maximum emission rate (emission rating multiplied by the maximum application rate) must be no greater than any one of the methods for the same fumigant described in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, and 6451.1.

(b) For the San Joaquin Valley, Southeast Desert, and Ventura ozone nonattainment areas, upon written request, the Director may approve use of a field fumigation method either not described or excluded from use in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, or 6451.1 if the request meets the following criteria:

(1) The request is accompanied by scientific data documenting the VOC emissions;

(A) The emission rating, as specified in section 6452.4, is no greater than any one of the methods for the same fumigant allowed for use in the San Joaquin Valley, Southeast Desert, and Ventura ozone nonattainment areas as specified in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, or 6451.1, or

(B) The maximum emission rate (emission rating multiplied by the maximum application rate) is no greater than any one of the methods for the same fumigant allowed for use in the San Joaquin Valley, Southeast Desert, and Ventura ozone nonattainment areas as specified in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, or 6451.1.

6452. Reduced Volatile Organic Compound Emissions Field Fumigation Methods.

(c) Criteria the Director shall consider includes whether:

- (1) the data and information provided are sufficient to estimate emissions;
- (2) the results are valid as indicated by the quality control data; and
- (3) the conditions studied represent agricultural fields fumigated.

(d) The Director shall publish a notice of interim approval for a field fumigation method on the Department's Web site. The interim approval expires three years after the date of approval.

NOTE: Authority cited: Sections 11456, 12976, 14005, and 14102, Food and Agricultural Code.

Reference: Sections 11501, 14006, and 14102.

6452.1 Fumigant Volatile Organic Compound Emission Records and Reporting.

(a) Any person who applies field fumigants shall maintain records of fumigant applications pursuant to section 6624.

(b) Any person who applies field fumigants shall report the information specified in section 6626.

NOTE: Authority cited: Sections 11456, 12976, 14005, and 14102, Food and Agricultural Code.

Reference: Sections 11501, 14006, and 14102.

6452.2 Fumigant Volatile Organic Compound Emission Limits.

(a) The Director shall establish field fumigant volatile organic compound (VOC) emission limits in the Annual Volatile Organic Compound Emissions Inventory Report issued pursuant to section 6452.4 for areas that exceed 80 percent of the emissions benchmarks listed below during the May 1 through October 31 time period:

<u>Ozone Nonattainment Area</u>	<u>Total Agricultural and Structural VOC Emissions Inventory Benchmarks from May 1 to October 31</u>
<u>Sacramento Metro</u>	<u>900,000 lbs. (2.4 tons/day average)</u>
<u>San Joaquin Valley</u>	<u>5,900,000 lbs. (16.0 tons/day average)</u>
<u>South Coast</u>	<u>1,500,000 lbs. (4.1 tons/day average)</u>
<u>Southeast Desert</u>	<u>230,000 lbs. (0.62 tons/day average)</u>
<u>Ventura</u>	<u>970,000 lbs. (2.6 tons/day average)</u>

6452.2 Fumigant Volatile Organic Compound Emission Limits.

This subsection shall not apply to Ventura until 2012. The field fumigant VOC emission limits for the Ventura ozone nonattainment area prior to 2012 are established pursuant to subsection (c)

(b) The Director shall calculate the field fumigant VOC emission limits specified in (a) by subtracting the nonfumigant pesticide VOC emissions from the total agricultural and structural VOC emissions inventory benchmarks. Nonfumigant pesticide product emissions will be the summation of the pounds of each pesticide product used multiplied by the VOC content (emission potential) for the specific product.

(c) For the Ventura ozone nonattainment area, the Director establishes a field fumigant VOC emissions limit of 1,214,000 pounds (average 3.30 tons/day) for applications that occur during May 1 to October 31, 2008. The Director shall establish field fumigant emission limits in Ventura for 2009, 2010, and 2011, in the Volatile Organic Compound Emissions Inventory Report pursuant to section 6452.4 by subtracting the nonfumigant emissions from the following benchmarks:

<u>Ozone Nonattainment Area</u>	<u>Total Agricultural and Structural VOC Emissions Inventory Benchmarks from May 1 to October 31</u>
<u>Ventura</u>	<u>1,340,000 lbs. (3.63 tons/day average) in 2009</u>
<u>Ventura</u>	<u>1,190,000 lbs. (3.23 tons/day average) in 2010</u>
<u>Ventura</u>	<u>1,080,000 lbs. (2.93 tons/day average) in 2011</u>

NOTE: Authority cited: Sections 11456, 12976, 14005, and 14102, Food and Agricultural Code.

Reference: Sections 11501, 14006, and 14102, Food and Agricultural Code.

6452.3 Field Fumigant Volatile Organic Compound Emission Allowances.

(a) No person may apply a field fumigant during the May 1 through October 31 time period in an ozone nonattainment area for which a fumigant emission limit has been established pursuant to section 6452.2, unless their restricted material permit includes a field fumigant emission allowance.

(b) To obtain a field fumigant emission allowance, a permittee shall request an emission allowance by submitting information to the commissioner by a date designated by the commissioner. The information must include but is not limited to the following:

- (1) operator identification number;
- (2) county;
- (3) crop;
- (4) month(s) of application;
- (5) number of acres to be fumigated;
- (6) identification of each site to be fumigated;
- (7) meridian, township, range, and section of sites to be fumigated;

6452.3 Field Fumigant Volatile Organic Compound Emission Allowances. continued

(b) continued

- (8) verification of operator of property for each site identified;
- (9) identification of fumigant products to be used;
- (10) the application rate; and
- (11) fumigation method.

(c) The Director shall establish a fumigant emission allowance(s) for each permittee so that the total allowances in each ozone nonattainment area do not exceed the fumigant limit established for that area. If the total allowances requested exceed an established fumigant emission limit, the Director will proportionally reduce each request to ensure that the limit is not exceeded.

(d) Commissioners in each ozone nonattainment area subject to a fumigant emission limit shall issue permits or amend existing permits to comply with the fumigant emission allowance(s) established by the Director.

(e) Commissioners shall deny any notice of intent that does not comply with the permittees' fumigant emission allowances.

NOTE: Authority cited: Sections 11456, 12976, 14005, and 14102, Food and Agricultural Code.

Reference: Sections 11501, 14006, and 14102, Food and Agricultural Code

6452.4. Annual Volatile Organic Compound Emissions Inventory Report.

(a) The Director shall issue an annual emissions inventory report for the Sacramento Metro, San Joaquin Valley, South Coast, Southeast Desert, and Ventura ozone nonattainment areas. The emission inventory report must:

(1) report the total agricultural and structural (fumigant and nonfumigant) pesticide volatile organic compound (VOC) emissions for the previous years. Nonfumigant pesticide product emissions will be the summation of the pounds of each pesticide product used multiplied by the VOC content (emission potential) for the specific product. Fumigant product emissions will be the summation of the pounds of each pesticide product used multiplied by the emission potential for that specific product and VOC emission rating for the application method, as specified in (5);

(2) evaluate compliance with the total pounds of agricultural and structural VOC emissions specified in section 6452.2;

(3) establish fumigant emissions limits established pursuant to section 6452.2 for the upcoming year;

(4) (reserved)

(5) establish an emission rating for each field fumigation method described in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, 6451.1, or 6452. The emission rating will be expressed as a percentage of the amount of fumigant applied. The Director shall base the emission rating upon available scientific data documenting the VOC emissions.

(b) A draft emission report shall be made available to the public for comment. A 45-day public comment period will be provided to allow for submission of written statements or arguments to the Director for review before making finalizing the Annual Volatile Organic Compound Emission Report. The emission report will be posted on the Department's Web site.

(c) The emission ratings as shown in Table 22 in the September 29, 2007 Barry, Spurlock, and Segawa memorandum to John Sanders, shall be used to determine the emissions. These emission ratings may be modified by the final annual emissions inventory report.

6452.4. Annual Volatile Organic Compound Emissions Inventory Report. continued

NOTE: Authority cited: Sections 11456, 12976, 14005, and 14102, Food and Agricultural Code.

Reference: Sections 11501, 14006, and 14102, Food and Agricultural Code.

6453. Chloropicrin and Methyl Bromide – Nursery and Commodity Fumigation.

(a) When chloropicrin or methyl bromide is used, singly or in combination, to treat nursery potting soils or soil mixes, nursery stock, and other agricultural commodities, appliances, or equipment, it shall be done in a properly sealed fumigation chamber, railroad car, or truck trailer, or under a gas confining tarp approved by the commissioner or director. The commissioner or director may specify the fumigation period. Injection shall be made in a manner that minimizes gas loss.

(b) When chloropicrin or methyl bromide is applied singly or in combination, the commissioner or director may require the treatment site or fumigation chamber to be posted and attended for a specified time after application.

NOTE: Authority cited: Sections 11456, 12976, 12981, 14005 and 14102, Food and Agricultural Code.

Reference: Sections 11501, 12981, 14006 and 14102, Food and Agricultural Code.

6454. Chloropicrin and Methyl Bromide-Structural Fumigation.

This section supplements the methyl bromide fumigation requirements found in the Business and Professions Code and Title 16 of the California Code of Regulations, as well as directions for use given on methyl bromide product labeling.

(a) When fumigating a structure, the fumigator shall ensure that the distance between the fumigated structure and its property line shall meet the following criteria and that no person, other than the fumigation crew, enters the area prescribed in either (1), (2), or (3) below during the treatment period:

(1) For fumigations utilizing 50 pounds of methyl bromide or less, a distance of at least five (5) feet must exist; or

(2) For fumigations utilizing more than 50 pounds, but less than 80 pounds, a distance in feet calculated using the following formula must exist:

5 times the total poundage of methyl bromide minus 240 feet; or

(3) For fumigations utilizing 80 pounds or more, a distance in feet equal to two (2) times the total poundage of methyl bromide applied must exist.

(b) Structures shall be covered with the required tarpaulins or sealed prior to fumigation. The "acceptable" tarpaulin used in fumigations shall be vinyl coated with a minimum weight of seven (7) ounces per square yard (or having a fumigant retention capability equal to or greater than that provided by the seven-ounce weight tarpaulin). The vinyl coating shall not be worn, cracked, abraded, or similarly damaged to the extent that any of the underlying fabric shows through the vinyl coating.

(c) All cuts, tears, holes, or similar damage to tarpaulins shall be repaired prior to introduction of the fumigant. Temporary repairs to damaged tarpaulins shall be made with vinyl coated self-adhesive tape, or the damaged area of the tarpaulin may be rolled and clipped so the tarpaulin's fumigant gas retention capability is maintained.

6454. Chloropicrin and Methyl Bromide-Structural Fumigation., continued

(d) Fumigators shall use the fumigant retention method specified in the table below for the application rate and poundage combinations utilized in the fumigation:

<i>Methyl Bromide Application Rate Per 1,000 Cubic Feet of Structure</i>	<i>Total Pounds of Methyl Bromide Applied in a 24-hour Period</i>	<i>Fumigant Retention Method</i>
Up to 0.5 pounds	Not more than 50 pounds	"acceptable" tarpaulin
	----- More than 50 pounds, but less than 1,000 pounds	----- "acceptable" tarpaulin, or if the structure is a concrete tilt-up, seal with vinyl coated self-adhesive tape
More than 0.5 pounds Up to 1.5 pounds	Not more than 50 pounds	"acceptable" tarpaulin, and a side drape of one either: (1) an "acceptable" tarpaulin or (2) an unused 4-mil disposable polyethylene sheet
	----- More than 50 pounds, but less than 1,000 pounds	----- "acceptable" tarpaulin, or if the structure is a concrete tilt-up, seal with vinyl coated self-adhesive tape
More than 1.5 pounds Up to 3.0 pounds	Not more than 50 pounds	"acceptable" tarpaulin, and a side drape of one unused 4-mil disposable polyethylene sheet
	----- More than 50 pounds, but less than 1,000 pounds	----- "acceptable" tarpaulin, or if the structure is a concrete tilt-up, seal with vinyl coated self-adhesive tape

(e) When tarpaulins are used, all sides of the structure shall be draped to the ground. Sand snakes, water snakes, or similar weights shall be used to seal the base of the tarpaulins to the ground. Prior to the placement of these snakes or weights, the soil adjacent to the structure foundation shall be thoroughly watered.

(f) Chloropicrin shall be used as a warning agent when fumigating a structure unless specifically prohibited by regulations or product labeling.

(g) A fan shall be used to disperse chloropicrin and methyl bromide within the structure. Chloropicrin shall be released into the airstream of the fan when it is introduced (either by itself or in combination with methyl bromide).

(h) Aeration of the fumigated structure shall not begin earlier than one hour after sunrise or later than one hour before sunset. The sunrise and sunset times published in the local newspaper shall be used to establish aeration timing.